Ⱶ·Ꭺ

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,020	01/15/2002	Ari Tourunen	P 290450 2010028US/SM L/k	7874

909	7590	12/26/2006

PILLSBURY WINTHROP SHAW PITTMAN, LLP
P.O. BOX 10500
MCLEAN, VA 22102

EXAMINER
MATTIS, JASON E

ART UNIT	PAPER NUMBER
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/26/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 September 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-18 and 20-26* is/are rejected.

7)☒ Claim(s) *3 and 19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This Office Action is in response to the Amendment filed 9/28/06. Due to the

amendment, the previous claim objections have been withdrawn. New claims 17-26

have been added. Claims 1-26 are currently pending in the application.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1-2, 5-6, 10-12, 15-18, 21-22, and 26 are rejected under 35 U.S.C. 102(e)

as being anticipated by Irvin et al. (U.S. Pat. 6381713 B1).

With respect to claims 1, 11, and 15-17, Irvin et al. discloses a packet radio

system including a mobile station apparatus and method for arranging error control of

packet-switched data **(See the abstract, column 11 line 42 to column 12 line 11, and**

Figure 1 of Irvin et al. for reference to a wireless packet data system including

mobile stations that operates a method of arranging error control of packets that

are separated into different fields). Irvin et al. also discloses selecting during

connection set-up conditions that apply for the processing of the first part and the

second part in an error situation **(See column 6 lines 20-67 and Figure 3 of Irvin et al.**

for reference to determining and cataloging conditions to use for processing data

packets that have errors in a specified packet data field with the some conditions

being based on the time of a data session, the locations of devices, the identities

of devices, quality of service, and grade of service considerations, which are all

determined at the time of connection set-up). Irvin et al. further discloses detecting

errors in received data **(See column 7 lines 1-11 and Figure 4 of Irvin et al. for**

reference to determining which, if any, fields or portions of information in a

received packet are flawed). Irvin et al. also discloses checking whether conditions to

allow an erroneous first and/or second part to be transmitted to upper protocol layers

(See column 7 lines 12-35 and Figure 4 of Irvin et al. for reference to determining

if the location of the error allows the packet to be passed up the protocol stack).

Irvin et al. further discloses transmitting the first part, the second part, or the first and

second part to the upper protocol layers in response to conditions allowing it **(See**

column 7 lines 12-35 and Figure 4 of Irvin et al. for reference to passing a packet

up the protocol stack if conditions allow for it).

      With respect to claims 2, 12 and 18, Irvin et al. discloses that the first part

comprises header fields and the second part comprise payload data **(See column 6**

lines 1-19 and Figure 3 of Irvin et al. for reference to a packet being divided into

header fields 320 and a payload 350).

With respect to claims 5 and 21, Irvin et al. discloses indicating to upper layers

an error detected in the first and/or second part of the packets **(See column 7 lines 1-**

11 and Figure 4 of Irvin et al. for reference to indicating detection of an error and

the location of the detected error in steps 430 and 460).

With respect to claims 6 and 22, Irvin et al. discloses that an error indication is

added to erroneous data units and it is checked whether the data units meet the

conditions **(See column 7 lines 1-11 and Figure 4 of Irvin et al. for reference to**

indicating detection of an error and the location of the detected error in steps 430

and 460 and for reference to determining whether conditions allowing the packet

to be passed up the protocol stack are met).

With respect to claims 10 and 26, Irvin et al. discloses that different conditions

apply for the mobile station a mobile station than for a network element **(See column 6**

lines 20-59 for reference to the conditions being set in a database that may be

different for each processing unit).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 4, 13, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Irvin et al. in view of Ojard et al. (U.S. Pat. 6266350 B1).

With respect to claims 4, 13, and 20, Irvin et al. does not disclose that the first

and second part are separated and transmitted on different logical channels.

With respect to claims 4, 13 and 20, Ojard et al., in the field of

communications, discloses separating a first and second part of a packet and

transmitting the parts on different logical channels **(See column 9 lines 29-44 of Ojard**

et al. for reference to separating a header part and a payload part of a packet and

transmitting the header in a separate sub-channel from the payload). Separating a

first and second part of a packet and transmitting the parts on different logical channels

has the advantage of allowing a change in the data of one of the parts to not effect the

data rate and transmission quality of the other part, since the two parts are transmitted

on separate channels.

It would have been obvious for one of ordinary skill in the art at the time of the

invention, when presented with the work of Ojard et al., to combine separating a first

and second part of a packet and transmitting the parts on different logical channels, as

suggested by Ojard et al., with the system and method of Irvin et al., with the motivation

being to allow a change in the data of one of the parts to not effect the data rate and

transmission quality of the other part, since the two parts are transmitted on separate

channels.

5.   Claims 7, 14, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Irvin et al. in view of Shin (U.S. Pat. 6738634).

With respect to claims 7, 14, and 23, Irvin et al. does not disclose using a radio

resource control protocol to management radio resources and determine instructions

and using an RLC entity to carry out an error check.

With respect to claims 7, 14 and 23, Shin, in the field of communications,

discloses using a radio resource control protocol to management radio resources and

determine instructions and using an RLC entity to carry out an error check **(See column**

1 lines 16-65, column 2 lines 11-17 and Figure 1 of Shin for reference using a

radio resource control protocol to send instructions and for reference to using an

RLC entity to perform error detection and correction). Using a radio resource

control protocol to management radio resources and determine instructions and using

an RLC entity to carry out an error check has the advantage of providing error

protection in a widely used GSM system.

It would have been obvious for one of ordinary skill in the art at the time of the

invention, when presented with the work of Shin, to combine using a radio resource

control protocol to management radio resources and determine instructions and using

an RLC entity to carry out an error check, as suggested by Shin, with the system and

method of Irvin et al., with the motivation being to provide error protection in a widely

used GSM system.

6.   Claims 8 and 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Irvin et al. in view of Ojard et al. as applied to claims 4 and 13 above, and further in view

of Shin.

With respect to claims 8 and 24, the combination of Irvin et al. and Ojard et al.

does not disclose handling logical connection by an RLC entity.

With respect to claims 8 and 24, Shin, in the field of communications, discloses

handling logical connection by an RLC entity **(See column 1 line 66 to column 2 line**

10 of Shin for reference using an RLC entity to control logical connections).

Using an RLC entity to control logical connections has the advantage of providing error

protection in a widely used GSM system.

It would have been obvious for one of ordinary skill in the art at the time of the

invention, when presented with the work of Shin, to combine using an RLC entity to

control logical connections, as suggested by Shin, with the system and method of Irvin

et al. and Ojard et al., with the motivation being to provide error protection in a widely

used GSM system.

7.   Claims 9 and 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Irvin et al. in view of Svanbro et al. (U.S. Pat. 6967964 B1).

With respect to claims 9 and 25, Irvin et al. does not disclose using a PDCP

entity to separate a packet and check for errors.

With respect to claims 9 and 25, Svanbro et al., in the field of communications,

discloses using a PDCP entity to separate a packet and check for errors **(See column 3**

line 57 to column 5 line 20 of Svanbro et al. for reference to using PDCP entities

to separate packet headers and perform error checking). Using a PDCP entity to

separate a packet and check for errors has the advantage of providing error protection

in a widely used GSM system.

It would have been obvious for one of ordinary skill in the art at the time of the

invention, when presented with the work of Svanbro et al., to combine using a PDCP

entity to separate a packet and check for errors, as suggested by Svanbro et al., with

the system and method of Irvin et al., with the motivation being to provide error

protection in a widely used GSM system.

Allowable Subject Matter

8.   Claims 3 and 19 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

9.   The following is a statement of reasons for the indication of allowable subject

matter: Claims 3 and 19 would be allowable since none of the prior art of record

discloses or renders obvious using header fields for decompression even if the

conditions prevented their transmission to upper layer, as claimed.

Response to Arguments

10.   Applicant's arguments filed 9/28/06 have been fully considered but they are not

persuasive.

Regarding Applicant's argument that "the cited prior art references fail to

disclose, teach or suggest the claimed method, system or apparatus where conditions

that apply for the processing of the first part and the second part of a received packet in

an error situation are selected during connection set-up", the Examiner respectfully

disagrees. Irvin et al. discloses that conditions for error processing depend on elements

including the time of a data session, the locations of devices, the identities of devices,

quality of service considerations, and grade of service considerations for a connection

(See column 6 lines 20-33 of Irvin et al.). These elements are connection specific and

must be determined at the time of connection set-up before packets of the connection

are processed. Since these elements must be determined at the time of connection set-

up, the error processing conditions relating to these elements are also determined at the

time of connection set-up. Therefore, Irvin et al. does disclosed the claimed "selecting

during connection set-up conditions that apply for the processing of a first part and a

second part of a packet in error situation".

Conclusion

11.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jason E. Mattis whose telephone number is (571) 272-

3154. The examiner can normally be reached on M-F 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jem

HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600